

Exhibit A

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Profile

Over 15 years of diplomatic and private sector service on the most cutting-edge national security issues of this generation, including but not limited to: counterterrorism, money laundering, counternarcotics, security and nation building. I served in many diverse and challenging locations worldwide. Certified Anti-Money Laundering Specialist (CAMS) certification since March 2018. Weapons qualified.

Director Financial Investigations & Education, CipherTrace, Menlo Park, CA – 2018-Present

- Responsible for coordinating and conducting cryptocurrency and blockchain investigations for International/National Law Enforcement, financial sector and legal customers.
- Conducted speaking engagements, presentations and training at large, global conferences to include INTERPOL, EUROPOL, NFCTA, ACAMS, etc; as well as webinars for audience 1,000+.
- Provide direct assistance to law enforcement to aid in money laundering and other criminal investigations involving cryptocurrency transactions. Provide training to law enforcement agencies on blockchain software transaction tracing.
- Created 8-hour certification course for cryptocurrency investigators. Built material for certification and software training, in English and Spanish.
- Liaison and business development with US and Foreign governments to assist with cryptocurrency research and trace capabilities. Maintain up-to-date knowledge of global cryptocurrency regulations and recommendations.
- Publish research and white papers on relevant cryptocurrency updates and advancements.
- Integral part of product development, global business development process and direct sales

BSA & Information Security Officer, Asst Vice President, First State Bank; Gainesville, TX – 2017-2018

- Responsible for regulatory compliance with regard to the Bank Secrecy Act (BSA)/Anti-money laundering (AML)/Office of Foreign Asset Control (OFAC) rules and regulations. Led and coordinated an overhaul of the Bank's BSA program and implemented initiatives to increase the BSA department's access to clients and their transactions, as well as introduced measures to ensure Bank BSA compliance across the board.
- Maintained regular communication with senior management and Board of Directors incorporate management's guidance into the development of Bank policies and procedures in order to ensure the operating success and efficiency of the Bank. Identify, track and report suspicious activity, ensure accurate and timely filings of CTRs and SARs. Conducted basic and extended due diligence on exempt customers, high risk customers and new customers as required.
- Received certification in vendor management and attended multiple IT security and information security seminars and conferences. Initiated and created the Bank's vendor management program and spearheaded the creation of a project management cycle and flow for all new projects throughout the Bank.
- Strengthen the Bank's Incident Response Plan and created an information classification program.

Foreign Service Officer, United States Department of State (US DoS) – 2008-2016

- US Embassy Panama City – 2014-2016 As a Political Officer, managed programs to develop policies with million-dollar budgets to help Government of Panama security officials strengthen

law enforcement and other rule of law institutional capabilities to enable the Panamanian Government to more effectively combat international narcotics trafficking, international crime, money laundering and terrorism. Developed, maintained and strengthened relationships with host and other foreign government officials. Oversaw and managed employees and locally employed staff.

- Washington D.C. – 2013-2014 As a Program Coordination Officer, developed workshops to enhance official training for officers being posted to Latin America to provide a deeper understanding of cultural norms and societal mores, and preparing officers in the realm of security and personal protection to enable them to carry-out duties in support of US policy in complicated and trying environments in Latin America. Led and managed workshop presenters.
- US Embassy Mexico City – 2011-2012 As a US diplomat, worked as a Program Officer to develop policies and manage multi-million-dollar programs to help Government of Mexico security officials strengthen law enforcement and other rule of law institutional capabilities to enable the Mexican Government to more effectively combat international narcotics trafficking, international crime, money laundering and terrorism. Implemented initiatives providing Mexico with technical assistance, equipment and best practice exchanges.
- Washington D.C. – 2009-2011 As a Political Officer, interpreted international political events impacting U.S. interest abroad. Briefed Department Officials and prepared detailed reports for policymakers.
- Hillah, Iraq – 2008-2009 As a Political Officer, worked to strengthen partnerships, civilian capacity and information sharing in Iraq to counter evolving terrorist threats and prevent the spread of violent extremism. Managed and oversaw programs to build security capabilities of foreign government partners to effectively counter terrorism. Engaged with Iraqi officials, reported on political and economic developments and assisted personal protection initiatives.

Project Manager, BAE; Vienna, VA – 2006-2008

- Managed programs and status reports for projects. Successfully outlined objectives and directly supported their execution, planned and coordinated time and resources. Built relationships with agencies and government officials.

Education

University Autonoma of Madrid; Madrid, Spain

MBA, 2004

University of Texas; Austin, TX

B.A. Government/Spanish Literature, 2001

Certifications and Conferences

Speaker: INTERPOL Global Conference on Human Trafficking and Migrant Smuggling. ACAMS Various Conferences; CAMS – Certified Anti-Money Laundering Specialist – March 2018; Certification: Banking Vendor Manager (SBS Institute); TBA BSA/AML Compliance School; TBA BSA/AML Compliance Management Seminar; Cryptocurrency: Assessing Trends and AML Implications; Cyber Security Threats & Tips 2017; 2017 Crime Trends & Technology: Halfway Checkpoint

Skills

Full fluency in Spanish (reading, writing, speaking), proficiency in Portuguese (reading, writing, speaking), basic Italian, international relations, relationship development, international security. Held US Government security clearances.



Investigation by CipherTrace of My Big Coin
April 9, 2020

Overview:

At the behest of the United States Department of Justice, CipherTrace investigated My Big Coin.

The My Big Coin (MBC) blockchain genesis block was mined on June 28, 2017 which remains documented and viewable on <https://www.blockexperts.com/mbc>. The top funded MBC addresses appeared to exhibit wash trading activity in an effort to artificially inflate transaction volumes and quantities. The majority of the apparent wash trading was done via transactions with the same address as the sender and receiver.

MBC Timeline (via Twitter):

December 22, 2013: My Big Coin tweeted for the first-time urging users sign up so that they can accept online payments instantly.

<https://twitter.com/MYBIGCOIN/status/414930581315923968>

January 21, 2014: MBC claimed to be launching a mobile app for Apple and Android phones in the future.

<https://twitter.com/MYBIGCOIN/status/425631466404319233>

January 21, 2014: First tweet about price (\$23.17). This tweet, nor future tweets, did not provide any documentation to substantiate the claimed value of the coin.

<https://twitter.com/MYBIGCOIN/status/425693612530081792>

January 27, 2014: Tweet stated that major contract news coming soon, which was immediately followed by a tweet that claimed the current value had risen to \$28.87. The tweet did not specify to what particular contract it referred, however, an “upcoming major” announcement was followed by a claim that the price increased.

<https://twitter.com/MYBIGCOIN/status/427811250291363842> and

<https://twitter.com/MYBIGCOIN/status/427890431477964801>

February 12, 2014: Previous tweets had few likes/retweets. From February 12, 2014, forward, reactionary activity increased exponentially. The following tweet had 50.2k retweets and no likes. The majority of the retweets were from accounts that demonstrated typical characteristics of bot-created or marketing service controlled twitter accounts, also known as



“purchased likes or retweets.” This tweet hash-tagged Visa and Mastercard. There was no link or documentation to support the association with Visa nor Mastercard.

<https://twitter.com/MYBIGCOIN/status/433623620985028608>

February 28, 2014: Tweet stated major announcement coming in the next 24 hours, which was followed by a claim that the current value increased from \$41.39 to \$47.56.

<https://twitter.com/MYBIGCOIN/status/439531436560105472> and

<https://twitter.com/MYBIGCOIN/status/439533944040882176>

March 6, 2014: Tweet announced that MBC (claimed to be) backed by gold. Price immediately jumped from \$47.56 to \$52.88.

<https://twitter.com/MYBIGCOIN/status/441709339410440192> and

<https://twitter.com/MYBIGCOIN/status/441711457562935296>

April 10, 2014: Previous few tweets, including this one, indicated value increased to \$76.57 with no major news.

<https://twitter.com/MYBIGCOIN/status/457567033484673024>

May 1, 2014: MBC claimed to be first cryptocurrency company to launch an IPO and claimed that the value rose from \$76 to \$91.32.

<https://twitter.com/MYBIGCOIN/status/462066782271176704> and

<https://twitter.com/MYBIGCOIN/status/462332484907466753>

May 21, 2014: MBC announced a new website ‘mybigcoin.com’ and then claimed the value rose from \$91 to \$102.13.

<https://twitter.com/MYBIGCOIN/status/469122556663169024> and

<https://twitter.com/MYBIGCOIN/status/469229910326657024>

November 7, 2014: MBC announced that current coin value was \$121.38 (last of claims as to the value of MBC).

<https://twitter.com/MYBIGCOIN/status/530970794185482240>

June 11, 2015: MBC announced acquisition of Shot Spirits Corporation. My Big Coin Pay, Inc. closed an agreement to acquire the majority interest of Shot Spirits Corporation. As a result, My Big Coin Pay became a wholly owned subsidiary of Shot Spirits. John Roche, CEO of My Big Coin Pay, said that he was “hopeful that our listing on the OTC Pink Sheets will provide us with access to new investors, new sources of capital with which to grow our company, and greatly enhance our visibility and market awareness of our developing cryptocurrency payments platform.”

<https://twitter.com/MYBIGCOIN/status/609198351360393216>



August 1, 2015: MBC retweeted a photo from MBC EXCHANGE Twitter account. The tweet encouraged people to sign up to receive free MBC. The retweeted photo claimed that MBC 1) "partners with Mastercard" and 2) was the "first Cryptocurrency to be backed by Gold."

<https://twitter.com/MBCEXCHANGE/status/627676986421477376>

Nearly two-year period during which @mybigcoin tweeted about topics not relevant to MBC, some patriotic or community supportive tweets.

June 30, 2017: MBC began to tweet again about topics relevant to their business and announced a new website and new products, but did not provide specifics

<https://twitter.com/MYBIGCOIN/status/880724186599051264>

July 6, 2017: MBC claimed to have done a "major system update" and the introduction of a new crypto wallet, which claimed to allow users to mine MBC. The tweet did not provide specifics as to the major system upgrade

<https://twitter.com/MYBIGCOIN/status/882952177768996864>

July 19, 2019: MBC announced the launch of its blockchain in one day and in following tweet posted a link to the MBC block explorer

<https://twitter.com/MYBIGCOIN/status/887717049178308609> and

<https://twitter.com/MYBIGCOIN/status/887717164655849472>

July 28, 2017: MBC posted novaexchange.com/market/BTC_MBC/

<https://twitter.com/MYBIGCOIN/status/890996478541406209>

September 15, 2017: MBC tweet announced the blockchain reached 100,000 blocks and provided a link to the Blockexperts.com/mbc website

<https://twitter.com/MYBIGCOIN/status/908740950742130688>

September 19, 2017: MBC announced new web wallet

<https://twitter.com/MYBIGCOIN/status/910310571102236673>

November 7, 2017: MBC announced their intention to expand to new ICO exchanges and urged users to vote for them to be listed

<https://twitter.com/MYBIGCOIN/status/927937175705886720>

March 8, 2018: MBC posted link to coinlib.io which listed MBC price, historic charts, and detailed metrics

<https://coinlib.io/coin/MBC/My%20Big%20Coin>

<https://twitter.com/MYBIGCOIN/status/971874442484752384>



March 9, 2018: MBC posted link that provided analysis on coin

<https://awebanalysis.com/en/coin-details/my-big-coin-mbc/>

<https://twitter.com/MYBIGCOIN/status/972142565385322496>

May 15, 2018: MBC posted their CryptoCompare page on CryptoCompare.com. (the MBC page no longer available)

<https://twitter.com/MYBIGCOIN/status/996405758731345920>

June 19, 2018: MBC announced block 450,053

<https://twitter.com/MYBIGCOIN/status/1009100541606019072>

June 20, 2018: MBC posted link for awebanalysis.com exchanges where listed

<https://twitter.com/MYBIGCOIN/status/1009430387800432647>

June 21, 2018: MBC announced listing on exchange crypto-bridge.org (Closed in Dec 2019)

<https://twitter.com/MYBIGCOIN/status/1009871547530543104>

July 3, 2018: MBC posted link to an article on <http://cryptoglobe.com/> titled My Big Coin Could Determine CFTC's Powers over Crypto

<https://twitter.com/MYBIGCOIN/status/1014209159636574208>

November 12, 2018: MBC announced block 500,212

<https://twitter.com/MYBIGCOIN/status/1061989747843784704>

December 3, 2018: MBC announced relaunch on Nova. Did not provide additional information as to the "re-launch." <https://twitter.com/MYBIGCOIN/status/1069643847947304961>

December 11. 2018: Tweeted link to NovaExchange.com along with "Trade and sell"

<https://twitter.com/MYBIGCOIN/status/1072538969575952390>

MBC on other Sites:

Coin Gecko <https://www.coingecko.com/en/coins/my-big-coin>

CoinLib <https://coinlib.io/coin/MBC/My+Big+Coin>

Facebook: <https://www.facebook.com/MyBigCoin/>

Twitter: <https://twitter.com/MYBIGCOIN/>

YouTube: https://www.youtube.com/channel/UCeMcSji-n75KdQq_CU2_Xlg

Website: [https://www.mybigcoin.com/](https://web.archive.org/web/20190831051326/https://www.mybigcoin.com/)



Good Faith:

Attempt to ICO

<https://twitter.com/MYBIGCOIN/status/927937175705886720>

Wash Trading

CipherTrace identified several addresses that appeared to conduct wash trading on the MBC Blockchain. Some notable example addresses that engaged in wash trading activity include MGNDVck9cGyVQtBKmS6Z9HxojEf5T1ope (MGND), MBpLeZithEcfHjLDwrMCsKguxEwHytgQt (MBpL), (MX2K) MX2KKdodvo7jL8E6TsVVMdrm5WWqHXzHdJ and MCHTiYV6oiLw1xcPpbwshdjPJhgyji4k. Wash trading is effective for inflating transaction volumes. By conducting these internal transfers, it can dramatically increase the transaction volume of an address and make it appear more legit.

MGND

MGND mined MBC continuously for nearly the first month of the blockchain existence (image A) and then conducted transactions with itself, combining and dividing MBC.

A.

940e6997b5111a0548ffac41de5ada605df722e72e3264284daa3a9af8dc8441		
No Input (Newly mined coins) + Fees	↗	MGNDVck9cGyVQtBKmS6Z9HxojEf5T1ope 50 MBC
Monday 3rd of July 2017 01:37:08 - 1 transaction(s) in - 1 transaction(s) out - coinbase		
81b96134ae8a774f2d75e7bb1beef7694fcc4feba5e34d337a2bbf1fa07941		
No Input (Newly mined coins) + Fees	↗	MGNDVck9cGyVQtBKmS6Z9HxojEf5T1ope 50 MBC
Monday 3rd of July 2017 01:34:03 - 1 transaction(s) in - 1 transaction(s) out - coinbase		
3a472edc9ac3fdbbd9873112011cd33c4307d13f4bf4162dae4e79c6edcb0c7		
No Input (Newly mined coins) + Fees	↗	MGNDVck9cGyVQtBKmS6Z9HxojEf5T1ope 50 MBC
Monday 3rd of July 2017 01:32:58 - 1 transaction(s) in - 1 transaction(s) out - coinbase		

B.



0c939e9fe07dcfa292c179fb46bd7a6bd73394b0800cba90e54a7c3345f6e998

MGNDVck9cGyVQtBkmS6Z9HxojEf5T1ope	50 MBC	➤	MGNDVck9cGyVQtBkmS6Z9HxojEf5T1ope	25 MBC
			MGNDVck9cGyVQtBkmS6Z9HxojEf5T1ope	25.00136895 MBC

Tuesday 4th of July 2017 03:42:54 - 1 transaction(s) in - 2 transaction(s) out

0.00136895 MBC

929feb46ea04a19b495b350c7201668b064692ee17f2a41da1ea0ed9ee428ed8

MGNDVck9cGyVQtBkmS6Z9HxojEf5T1ope	50 MBC	➤	MGNDVck9cGyVQtBkmS6Z9HxojEf5T1ope	25 MBC
			MGNDVck9cGyVQtBkmS6Z9HxojEf5T1ope	25.00109516 MBC

Tuesday 4th of July 2017 02:20:33 - 1 transaction(s) in - 2 transaction(s) out

0.00109516 MBC

24bbf73e800feef7648ca6c9b76fe6c3a8956e90d997344ad0cd92f30f23b1f1

MGNDVck9cGyVQtBkmS6Z9HxojEf5T1ope	50 MBC	➤	MGNDVck9cGyVQtBkmS6Z9HxojEf5T1ope	25 MBC
			MGNDVck9cGyVQtBkmS6Z9HxojEf5T1ope	25.00087613 MBC

Tuesday 4th of July 2017 02:13:49 - 1 transaction(s) in - 2 transaction(s) out

0.00087613 MBC

MBpL

dc03340a23441cde54350c2cb7b0ef243be7d7d523564c8d33b52b32ad599698

MBpLeZitfhEcflHjLDwrMCsKguxEwHytgQt	577.95988286 MBC	➤	MBpLeZitfhEcflHjLDwrMCsKguxEwHytgQt	1102.08765219 MBC
MBpLeZitfhEcflHjLDwrMCsKguxEwHytgQt	261.76 MBC			
MBpLeZitfhEcflHjLDwrMCsKguxEwHytgQt	261.77657295 MBC			

Wednesday 21st of February 2018 17:02:02 - 3 transaction(s) in - 1 transaction(s) out

0.59119638 MBC

cd501bfc8c3f6af1ef88ca41a16ebc54d1c09bb0d2eff6a8e519b8bc647e76fa

MBpLeZitfhEcflHjLDwrMCsKguxEwHytgQt	275.17856965 MBC	➤	MBpLeZitfhEcflHjLDwrMCsKguxEwHytgQt	1160.44513228 MBC
MBpLeZitfhEcflHjLDwrMCsKguxEwHytgQt	309.09939102 MBC			
MBpLeZitfhEcflHjLDwrMCsKguxEwHytgQt	575.54547494 MBC			

Wednesday 21st of February 2018 17:01:49 - 3 transaction(s) in - 1 transaction(s) out

0.62169667 MBC

4e88c06b7f48d6bd7b60d5171f73a71f1303745769c3c2b94e7bb922c33834de

MX2KK



44d3f4ba72d44a6c2606114b76a7515e54b9bea0544849300e606b461d26c6f5

MX2KKdodvo7jL8E6TsVVMdrm5WWqHXzHdj 1270.85925991 MBC ➤ MX2KKdodvo7jL8E6TsVVMdrm5WWqHXzHdj 1272.53088937 MBC

Sunday 1st of September 2019 13:37:55 - 1 transaction(s) in - 1 transaction(s) out

1.67162946 MBC

ddcb3f0f966c6bd046b006fc130c047532f88cfb19f5622c10048bf91a39d1c1

MX2KKdodvo7jL8E6TsVVMdrm5WWqHXzHdj 758.1 MBC ➤ MX2KKdodvo7jL8E6TsVVMdrm5WWqHXzHdj 1366.92282087 MBC

MX2KKdodvo7jL8E6TsVVMdrm5WWqHXzHdj 607.13 MBC

Sunday 1st of September 2019 13:37:24 - 2 transaction(s) in - 1 transaction(s) out

1.69282087 MBC

Current Status of MBC Coins

As of April 9, 2020, BlockExperts blockchain explorer identified 16 addresses that accounted for 91.92% of all MBC coins mined/created. The 16 addresses, identified below, show a combined, total balance of 9399342.89 MBC. Those addresses are as follows:

Rich List Distribution

Address	Amount (MBC)	MBC as % of Total	TX	Total Send	Total Received
MX2KKdodvo7jL8E6TsVVMdrm5WWqHXzHdj	2,824,362.40	30.05%	268745	205074512.07699 MBC	207898874.47749 MBC
MTRe4UMsEEAX4PdkftxfRiKwVDQt6EvgWx	1,011,899.10	10.77%	31443	33681180.380437 MBC	34693079.475882 MBC
MVLuEv3AYnAC68bE7po2sLu5qqqGgMXfCn	836,703.66	8.90%	103486	57270145.528005 MBC	58106849.187677 MBC
M9XKn1W5cwzDmztY8vo6r32i96oK5DtTcJ	608,524.00	6.47%	5202	14938339.187605 MBC	15546863.188145 MBC
MQw6Gr5B9VDeX19myNiZikwaAgzoTgPdY4	546,074.32	5.81%	4917	13028697.041885 MBC	13574771.363702 MBC
MRtCs8LjpG6NsMptSEuFbqdUGuh9eS8nQ7	467,571.28	4.97%	3142	11275050.581597 MBC	11742621.861358 MBC
MFRBFKaRjZE3E19u8ngEus4tn2tjPDoNix	456,689.88	4.86%	4142	895990.2121804 MBC	9416592.093371 MBC
MSdDYyfHcuk5dnGh6ATxZ6gMaqvnpBqfow	405,118.10	4.31%	3685	9295295.2764059 MBC	9700413.371834 MBC
MWAMZUgUzXEeHKVq5QBcNoAXyiZofvvYZM	321,281.66	3.42%	3273	6820737.2495997 MBC	7142018.9049836 MBC
MN9DiRiYB7PZAkiiBAaw5Zk1DbKJqgnteH	235,041.08	2.50%	921	4708726.2894566 MBC	4943767.3731133 MBC
MMkqDXNphAF3WJMe8Y1LxvbD1uh8p4Wpy8	202,133.89	2.15%	758	4115219.2097021 MBC	4317353.0961776 MBC
MJ16pP53cBCQvYVAGjsh7ScJVFCSyg7bg	202,051.63	2.15%	1154	3670733.4184816 MBC	3872785.0456183 MBC
MFn5RDVWfFH6u1HCHciz2xWy4ZMikk9vjL	202,050.56	2.15%	1180	3723808.6508827 MBC	3925859.2149445 MBC
M8McL8bDBrhVBBMmpoqNV5wqXMcJ77t1ey	111,180.50	1.18%	21334	9114543.7643315 MBC	9225724.2625639 MBC



MHpEFsNbyMmAKG9Mweuq3bkd1UAsjafnjU	108,483.48	1.15%	15961	4667306.2782689 MBC	4775789.7558058 MBC
MNKA2wYaCkRRWTGNCwWyhm8uhhfQEdnXti	100,477.96	1.07%	33	701584.60444275 MBC	802062.56166911 MBC

Hard Fork:

Cryptocurrencies can be created, distributed and obtained via various mechanisms. One method is through what is known as a “hard fork.” A hard fork occurs when developers implement a chain split of an already existing blockchain. Technically speaking, a hard fork is a change in a blockchain protocol which is incompatible with previous versions, meaning that the nodes that do not update will not be able to process anymore transactions. Hard forks can be used to improve or update an existing protocol (i.e. every Ethereum upgrade is technically a hard fork), or even create a new independent protocol and blockchain (i.e. Bitcoin Cash). When a protocol upgrade or decision is controversial and there is no “true” majority of nodes that go one way or another the protocol usually *forks* into 2 incompatible blockchains - thus 2 cryptocurrencies. Since a fork is *always* based on the original blockchain, all transactions from the original one are also copied into the new fork. The original cryptocurrency and the forked version – a new cryptocurrency – have the same blockchain up to the block where the update – the hard fork – occurs, after which the blockchain for the original cryptocurrency and the forked cryptocurrency exist independently. Thus, a hard fork results in the owner retaining the original cryptocurrency as well as obtaining the new forked cryptocurrency.

Exchange Listings:

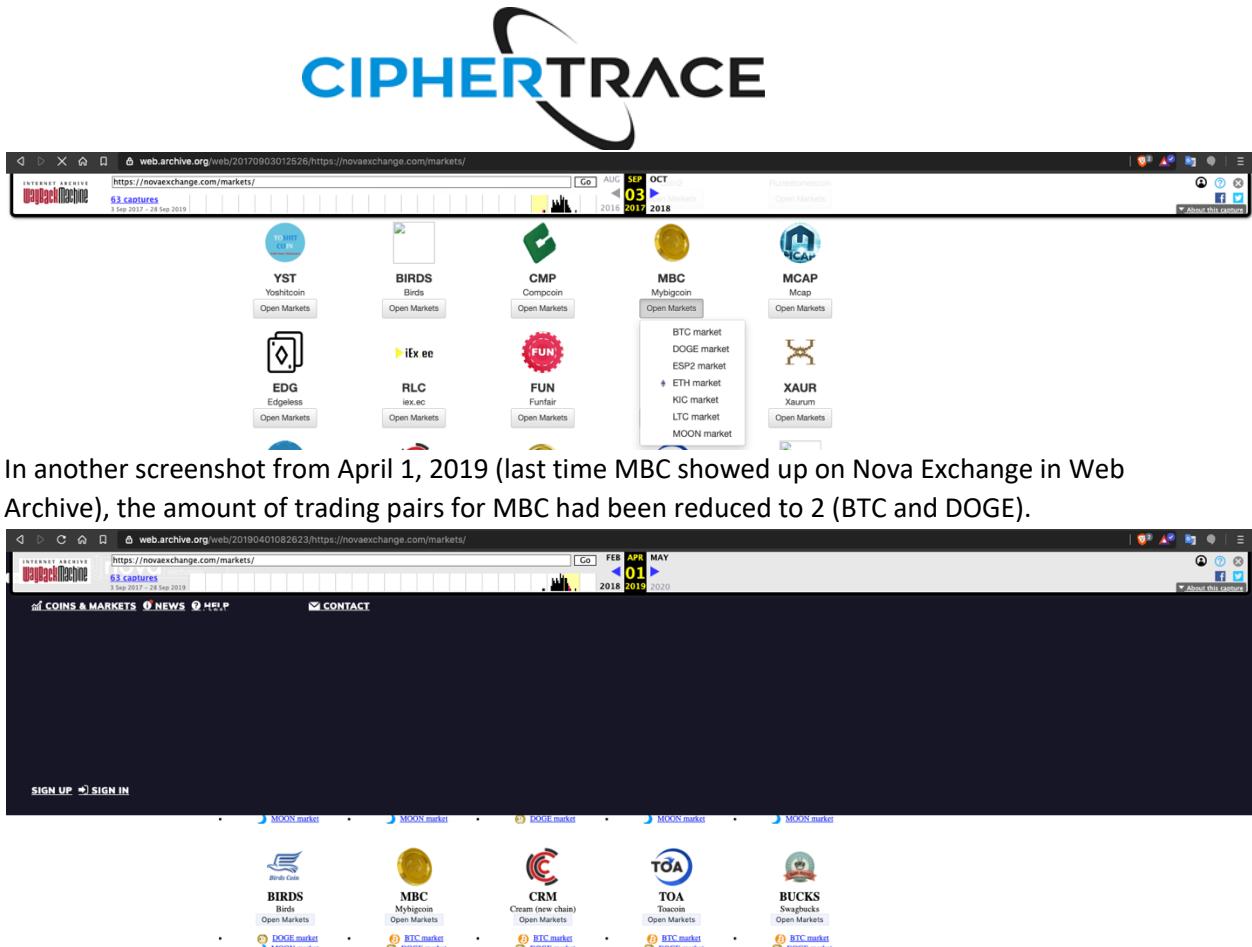
According to My Big Coin’s Twitter posts, below are some of the claimed exchange listings:

1. Nova Exchange (novaexchange.com)

Twitter Post: <https://twitter.com/MYBIGCOIN/status/1072538969575952390>

Nova Exchange was an altcoin cryptocurrency exchange based out of Sweden. The exchange closed in October of 2019 and there were a multitude of screen captures from Web Archive with two being shown below.

According to the screenshot below from web.archive.org, MBC was trading on Nova Exchange on September 3, 2017. This was the earliest that the link novaexchange.com/markets was captured by web.archive.org. At this time there were 7 trading pairs including BTC, DOGE, ESP2, ETH, KIC, LTC, and MOON.



In another screenshot from April 1, 2019 (last time MBC showed up on Nova Exchange in Web Archive), the amount of trading pairs for MBC had been reduced to 2 (BTC and DOGE).

2. CryptoBridge (crypto-bridge.org)

Twitter Post: <https://twitter.com/MYBIGCOIN/status/1009871547530543104>

Crypto-bridge.org was a decentralized cryptocurrency exchange (DEX) that closed in December of 2019. There are no screen captures from the Web Archive so it is unknown if MBC was truly listed on the exchange.

3. MBC Other Exchanges

Twitter Post: <https://twitter.com/MYBIGCOIN/status/1009430387800432647>

According to <https://awebanalysis.com/en/coin-details/my-big-coin-mbc/where-to-buy/>, MBC could be purchased on Binance, BitBay, Bittrex, and IQOption. It is not known if these listings are legitimate.

Technical Insight into Blockchain Code:

Most blockchains are either Proof-of-Work (PoW) or Proof-of-Stake (PoS) consensus. In order to change consensus algorithms after a blockchain is launched, one would have to issue a "fork" or network upgrade to change the underlying consensus protocols for the network to move from PoW to PoS. There are some chains such as Decred which claim to be a Hybrid PoW/PoS



consensus where they utilize the Bitcoin style of PoW yet allow certain nodes to time-lock their DCR in order to buy tickets and participate in the network (i.e. staking).

Nonetheless, MyBigCoin's [GitHub page](#) claimed that they were a PoS based cryptocurrency and had references to it in the [code](#).

According to the three Twitter posts documented below, these were three points in time when MBC reached a particular block number. The time period between the first 2 announcements was 277 days while the time period between the 2nd and 3rd announcement was 146 days. The block increase between the 1st and 2nd announcement was 350,053 blocks while the latter was 50,159. CipherTrace calculated the average block time for each indicated period - divide each time period's block increase by the number of days – which yielded an average block time of **1263.73 blocks per day** in period 1 and **343.55 blocks per day** in period 2. A change in block time would have been a large change in the code.

<https://twitter.com/MYBIGCOIN/status/908740950742130688> 9/15/17: 100,000 blocks

<https://twitter.com/MYBIGCOIN/status/1009100541606019072> 6/19/18: 450,053 blocks

<https://twitter.com/MYBIGCOIN/status/1061989747843784704> 11/12/2018: 500,212 blocks

Additionally, an overview analysis of individual blocks showed the majority of blocks had a single transaction contained in them. On the contrary, Bitcoin blocks typically have several thousands of transactions in each block, as seen below. Single-transaction blocks could cause several issues, the most notable would be the inability to scale and lack of efficiency.

Height	Timestamp	Mined	Transactions	Filled
624724	2020-04-06 14:34	7 minutes ago	2,430	<div style="width: 1.31 MB;"></div>
624723	2020-04-06 13:58	43 minutes ago	1,731	<div style="width: 1.18 MB;"></div>
624722	2020-04-06 13:50	51 minutes ago	2,689	<div style="width: 1.27 MB;"></div>
624721	2020-04-06 13:35	1 hour ago	2,640	<div style="width: 1.38 MB;"></div>
624720	2020-04-06 13:28	1 hour ago	2,681	<div style="width: 1.32 MB;"></div>
624719	2020-04-06 12:57	1 hour ago	2,181	<div style="width: 1.34 MB;"></div>
624718	2020-04-06 12:54	1 hour ago	2,308	<div style="width: 1.23 MB;"></div>
624717	2020-04-06 12:53	1 hour ago	2,633	<div style="width: 1.18 MB;"></div>
624716	2020-04-06 12:50	1 hour ago	2,173	<div style="width: 1.22 MB;"></div>

Furthermore, <https://github.com/MyBigCoin/MBC/tree/master/doc>, published the following : "MyBigCoin is a free open source project derived from Bitcoin, with the goal of providing a long-term energy-efficient scrypt-based crypto-currency. Built on the foundation of Bitcoin,



PPCoin and NovaCoin, innovations such as proof-of-stake help further advance the field of crypto-currency."

Analysis Summary

CipherTrace analysis of the MBC blockchain as compared to other popular cryptocurrency blockchains revealed several abnormalities with the protocol, transactions, block height and distribution coins.

The MBC blockchain started on June 28, 2017 and reached block height 686889 on September 18, 2020. (Block height: number of blocks on the blockchain.) This high number of blocks in such a short period is not congruent with other blockchain activity with similar block times and structure. MBC blockchain demonstrated erratic block times. (Block time: the time that passes between adding blocks to the blockchain.). Most blockchains have a discernable average block time, like Bitcoin which averages 10 minutes, Ethereum averages 13-15 seconds and Dash about 2 minutes 30 seconds. As previously noted, the average number of blocks during the first phase of MBC was 1263.73 blocks per day, whereas during the second phase it decrease significantly to 343.55 blocks per day.

A sample of the MBC block times shows not only erratic times, but also mistimed blocks. For example, MBC block 9360 was added on July 3, 2017, at 17:21:24. The next block was added exactly one minute later at 17:22:24, but then block 9362 was added at 17:22:19, exactly five seconds before the previous block 9361. The timestamp before the preceding block is technically possible, but it does not happen often. There could have been an occurrence where multiple miners (1,2, and 3) were mining a block at the same time which references its predecessor block in the header. Yet, at the point before commitment, another block was added to the chain. For example, the second (2) miner, in order to make sure their block was valid they would have to re-mine the previous/new block, adjust their block header template to show the predecessor block hash and block height. Thus, the timestamp that was already recorded in the block header theoretically did not need to be updated. Again, that is not a common occurrence, yet in the sample below, there are half-a-dozen examples of it happening. Miners could have set bed or manipulated timestamps as well. The blockchain will only ever have a single block at a given height or else its considered an orphan block. Though not impossible to have mistimed blocks, and multiple occurrences of this abnormality would suggest that there might have been some centralized control or manipulation of the blocks. Here is a sampling of 15 MBC blocks (blocks 9360-9375) with their block times and block hashes for identification purposes.



Block Height	Block Time	Block Hash
9360	17:21:24	000000fa58b690c87d511d2588139493bee3264d77d510e93385fd35aa2f9b49
9361	17:22:24	00000413c2f899f6bdf8a32e6ee8c07a2217ebefe9422c044c46d6e16955bad9
9362	17:22:19	34cb3fc8d3f3917a567bd31115f7e42dd88d47a4122bdbe6efd92d3eb11d4625
9363	17:22:44	95ad1420919d35a2ceed8b03e2d195ec2629d2ef9833930504fb4434184bdad8
9364	17:22:41	c49b4057026d81de1e5ba39a29c9af9d250ae152bdc031f7c6b1b8aeb40fd16b
9365	17:22:17	37a153e2a8fc76b1d46ecfac6b6e8b12167f6e9213146458081ce232c26318b4
9366	17:23:54	00000272788f76c20b66af8175c1f62bfb8e5c47d02e961f4c3b7605048daebd
9367	17:24:57	7d2ae128bffff7829474ab72520dc1a75f0657a6430a264188d88d559f924934
9368	17:24:52	0f0c58d723309a06e1a86a2c4a8717de7d3b16b164c20de4f1e8e74ff66ebe2f
9369	17:25:42	187c09bcd548b60dc34745f3d3984efadad411d7f455352d5d528a47e83a452f
9370	17:28:07	0000027f4f2832b8b94d474da9dc2dca3944c373705d170191a3f92f3755fc00
9371	17:27:23	d3ce80ce4bc8285ffa1a73547d9bb6b8fa3e3150c6ff91b0279351464c97d1d6
9372	17:28:23	000006769572c276901dd2df601a1c4649193ff904ddeb2d1c718105c7f3b367
9373	17:28:22	2e2f0528ae7fb088c7ebfe011dbe31ed2c26beb7302b4ca6ecf5c5bc1aed9a29
9374	17:28:43	000005ab367155bac480dac699ebd3edfaa9ad6cea38c018e9dda7d3b1e1e9c8
9375	17:32:08	000002d1a3bb0564f3fe2cc519ef93670440b0ac7519b10d0dbc9ef2ff414602

Another anomaly about the MBC was the lack of transparency into the protocol's transaction validation system, Proof of Work or Proof of Stake, and the manner in which the blockchain disbursed newly created MBC. During the first few thousand blocks, when 50 MBC was created or "mined" and given as a reward to an address, the 50 MBC coinbase was the only only transaction in the block. These 50 MBC coinbases were documented in the block explorer as either newly mined coins and/or fees. There was no indication throughout the MBC blockchain of any time of fees charged nor disbursed as income or payment. If MBC was in fact a Proof of Stake protocol, as indicated in its Github code, then the 50 MBC could not have been "mined" coins either. With Proof of Stake, the validator should receive a reward in proportion to their stake and/or fee income. Instead, the coinbase transactions appeared to be Airdrops. (Airdrop: a procedure through which an organization distributes a free coins or tokens to wallets of active members of the blockchain.). At block height 4,000, <https://www.blockexperts.com/mbc/height/4000> the block data showed that the miner was "Proof-of-Stake" with the block showing a coinbase transaction to be included in the "next transaction." However, at block 3,999, the miner field was "unknown". <https://www.blockexperts.com/mbc/height/3999> and the only transaction in the block was 50 MBC coinbase paid to MCHTiYVy6oiLw1xciPpbwshdjPJhgjyj4k, an address that received 3,043,525 MBC via 14,599 transactions in its lifetime. As mentioned above in the indications of wash trading, the 50 MBC coinbases were sent to the same small pool of MBC addresses.

With Proof of Work systems, miners must compete to solve a difficult puzzle utilizing computing power to earn the right to add a block to the chain. In order to add a malicious block, someone would need to gain control of 51% of the nodes in the network or have a computer more powerful than 51% of the network. The first miner to solve the puzzle and add the block, is given a reward for their work, these are mined coins.



In Proof of Stake, instead of miners, there are validators. The validators lockup or “stake” some of their coins as a stake in the ecosystem. The validators then bet on the blocks that they feel will be added next to the chain. There is no competition as the block creator is chosen by an algorithm based on the user’s stake. In order to add a malicious block, someone would need to own 51% of all the cryptocurrency on that blockchain. There is no mining reward, instead when a block gets added, the validators get a block. Reward in proportion to their stake.

Most popular blockchain solutions, like Bitcoin, rely on proof-of-work, guaranteeing that the output of the consensus is agreed upon with high probability. However, this probability depends on the delivery of messages and that the computational power of the system is sufficiently scattered among pools of nodes in the network so that no pool can mine more blocks faster than the crowd.

Furthermore, cryptocurrency protocols charge transaction fees. The work of validating transactions and adding them to the blockchain is done by miners. Miners spend computing power or stake their cryptocurrency ownership confirming transactions and therefore receive a financial reward: mining rewards and transactions fees. Fees incentivize the validation of the transactions on a blockchain.

An additional concern about the blockchain was the lack of evidence of a variety of users. Most blockchains with active and diversified user bases typically show multiple, if not thousands of transactions per block. It is generally inevitable that with a wide cast of users, at some point two or more users will execute transactions at the same time, creating a block with more than one transaction. Bitcoin, for example, averages 2,700 transactions per block. Ethereum averages 70 transactions per block, and that’s about every 13 seconds.



Investigation by CipherTrace of My Big Coin

18 May 2022

At the behest of the United States Department of Justice, CipherTrace investigated My Big Coin. CipherTrace provided an initial report dated April 9, 2020. This document supplements that report.

Pamela Clegg, of CipherTrace, produced this supplemental report to offer an official expert opinion report and document the investigation in support of that opinion. The initial report was a snapshot of information and findings to assist in making a decision about the case.

Part I: Witness Qualifications

Pamela A. Clegg is a leading expert on cryptocurrency investigations. Ms. Clegg has more than 15 years of diplomatic and private sector experience working on cutting-edge national security issues, including money laundering and fraud investigations relating to counterterrorism, counternarcotics, security, and nation building. This service expanded over many diverse and challenging locations worldwide. Ms. Clegg obtained her Certified Anti-Money Laundering Specialist (CAMS) in March 2018.

Ms. Clegg created and authored multiple cryptocurrency training courses and taught thousands of students around the world in the area of cryptocurrency investigations and compliance. Ms. Clegg has conducted trainings and given presentations internationally on cryptocurrency and financial crimes, including to Interpol, Europol, Department of Treasury, Department of Homeland Security and Department of Justice. She created and implemented certification courses that are attended by public and private sector investigators, compliance officers, and managers, and include:

1. Blockchain & Cryptocurrency Essentials Certification (BCEC). BCEC is a foundational course for executives new to cryptocurrency and blockchain. Participants learn the essentials behind blockchain and distributed ledger technology (DLT), how cryptocurrency transactions work, VASP typologies, industry trends, and the role blockchain analytics plays in the crypto ecosystem
2. Cryptocurrency Tracing Certified Examiner (CTCE). CTCE provides hands-on instruction in blockchain and cryptocurrency tracing. Participants develop and hone digital investigation techniques as they learn a risk-based approach to tracing the source of blockchain funds and de-anonymizing cryptocurrency transactions with cryptocurrency forensic tools.
3. Certified Cryptocurrency Risk Specialist (CCRS). CCRS provides the necessary knowledge base for financial institutions to have the ability to comply with regulatory requirements for identifying, assessing, and mitigating cryptocurrency risk exposure. CCRS also examines the best practices for pre-onboarding of corporate clients in the virtual currency space and to optimize existing compliance policies where necessary in accordance with evolving regulatory requirements, including specific country requirements as they relate to virtual asset businesses. It also delves into compliance issues and requirements pertinent to custodial solutions.

Ms. Clegg has authored multiple writings, including:

- 1) June 2021: Ransomware Seizure: Blockchain Analysis Helps US Authorities Seize Over \$2 Million in DarkSide Ransom Paid by Colonial Pipeline
<https://ciphertrace.com/ransomware-seizure-blockchain-analytics-helps-us-authorities-seize-over-2-million-in-darkside-ransom-paid-by-colonial-pipeline/>
- 2) April 2021: Blockchain Analytics—the Secret Weapon to Combatting Ransomware

<https://ciphertrace.com/blockchain-analytics-the-secret-weapon-to-combatting-ransomware/>

- 3) December 2020: Only 22% of Bankers and Financial Investigators Feel Confident Detecting Crypto-Related Payments
<https://ciphertrace.com/only-22-percent-of-bankers-feel-confident-detecting-crypto-related-payments/>
- 4) October 2020: Crypto Red Flags for Law Enforcement—How to know if your investigation involves cryptocurrency
<https://ciphertrace.com/crypto-red-flags-for-law-enforcement/>
- 5) August 2020: Tracing Ransomware: CipherTrace Helps McAfee Follow NetWalker Funds
<https://ciphertrace.com/tracing-ransomware-ciphertrace-helps-mcafee-follow-netwalker-funds/>
- 6) May 2020: UTXO vs Wallet- To- Wallet Tracing in Bitcoin Investigations (Whitepaper)
<https://ciphertrace.com/whitepaper-utxo-vs-wallet-to-wallet-tracing-in-bitcoin-investigations/>
- 7) February 2020: OCC Hits New York Based Bank With First Ever Enforcement Action for Lack of Crypto AML Compliance
<https://ciphertrace.com/occ-hits-new-york-based-bank-with-first-ever-enforcement-action-for-lack-of-crypto-aml-compliance/>
- 8) February 2020: Fighting Human Trafficking by Following the Money
<https://ciphertrace.com/fighting-human-trafficking-by-following-the-money/>
- 9) December 2019: ALERT: Tracing extorted bitcoin
<https://ciphertrace.com/alert-tracing-extorted-bitcoin/>

Ms. Clegg has also appeared on several broadcast and webinars presenting lectures and teachings on cryptocurrency, including:

1. Cryptocurrency Presentation at the 5th Global Conference on Criminal Finances and Cryptocurrencies on 7 December 2021. The virtual event was co-organized by the Basel Institute on Governance, INTERPOL and Europol.
<https://www.youtube.com/watch?v=q6GKVWz0s>
2. Virginia Tech Department of Computer Science. Ms. Clegg discussed the ways that blockchains and cryptocurrencies can facilitate tracing cyber crimes and ransom payouts. She also discussed the ways that CipherTrace operates when tracking financial transactions and examine several case studies from their recent Anti-Money Laundering Report.
https://www.youtube.com/watch?v=_DPEj9OfzHw

3. Cops & Robbers – REIMAGINE v 6.0 #11. Ms. Clegg sits down with Yonah Hochhauser from REIMAGINE 2021 to talk about what makes a good regulator, why crime on the blockchain can be solved, and the new world of non-geographical jurisdictions.
<https://cryptonews.com/videos/cops-robbers-why-crime-on-blockchain-is-easy-to-solve.htm>
4. LinkedIn Live – Data Connectors. Interview with Dawn Morrissey (CEO) and Michael Hiskey (CSO) to discuss financial crimes and ransomware involving cryptocurrency. Discussion emphasizes asset recovery in criminal cases.
https://www.youtube.com/watch?v=0-wSksy_aq4
5. Lightning Talks: Game-Changing Proposals for the Internet.
<https://www.youtube.com/watch?v=gYdYj6A2gWI>
6. True Crime Stories From the World of Crypt Hacks and Ransomware. Ms. Clegg shares a story of how CipherTrace teamed up with McAfee to tackle NetWalker ransomware, a ransomware that has become a franchise within the cybercrime underworld.
<https://www.youtube.com/watch?v=5bHseR7a8zw>
7. Cut Off the Case: Cryptocurrency and Ransomware Payments. Ms. Clegg joins a panel of experts to discuss ransomware and tracking ransomware payments.
<https://www.youtube.com/watch?v=mt8AzHrMX-0>

Part II: Background and Summary of Findings

1. Background on Virtual Currency

In understanding virtual currency investigations, some background on the terminology surrounding virtual currency is useful. Some key terms are discussed below.

Fiat Currency. Government issued currency that have a face value exceeding any commodity value. Fiat is not backed by a commodity like gold. Most paper money issued by governments like the U.S. Dollar (USD) is fiat currency.

Virtual Currency. A digital representation of value that functions as a medium of exchange, a unit of account, and/or a store of value. In some environments, it operates like digital fiat currency. Popular virtual currencies that are *not* also cryptocurrencies include Robux (for the online platform Roblox) and V-Bucks (for the online game Fortnite).

Cryptocurrency. Cryptocurrency is a type of virtual currency that utilizes cryptography to validate and secure transactions that are digitally recorded on a distributed ledger, such as a blockchain. The first block on the blockchain is referred to as the “genesis block.” This is the beginning of that cryptocurrency. Cryptocurrency allows for decentralized control as opposed to using centralized electronic money and banking systems. The most recognizable and valuable cryptocurrency is bitcoin (BTC), which was launched in 2009 via the Bitcoin blockchain. In 2021, bitcoin peaked at over \$60,000.00 USD to 1 BTC. Ethereum (ETH) is another valuable and popular cryptocurrency, which has reached a value of more than \$4,000.00 to 1 ETH in 2021. Other popular cryptocurrencies include Litecoin (LTC), Cardano (ADA), and Bitcoin Cash (BCH).

Cryptocurrency Exchange. Digital marketplace where one can purchase or trade cryptocurrencies. Some of the top cryptocurrency exchanges include Binance, Coinbase, Gemini, Kraken, and FTX. At those exchanges, customers are allowed to hold, send and receive cryptocurrency to different accounts and addresses. Users can trade cryptocurrencies or digital currencies for other assets, such as conventional fiat money or other digital currencies. Exchanges may accept credit card payments, wire transfers or other forms of payment in exchange for digital currencies or cryptocurrencies. A cryptocurrency exchange can be a market maker that typically takes the bid–ask spreads as a transaction commission for its service or, as a matching platform, simply charges fees.

Stablecoin. A type of cryptocurrency pegged to a currency like the U.S. dollar, a commodity such as gold, or algorithmically pegged to other cryptocurrencies. Stablecoins purport to offer the benefits of cryptocurrencies but with the more-stable valuations of certain fiat currencies.

Blockchain Analysis. Cryptocurrency blockchains are available to the public and reviewable on several platforms (e.g., Blockchain.com). Analysis of a blockchain can reveal, among other things, transactional history, trading frequency, block timing, and the total number of blocks.

Fork. A fork occurs when there is a change to the blockchain protocol of a cryptocurrency. A fork is always based on the original blockchain such that all transactions from the original blockchain are copied onto the subsequent blockchain(s).

- Hard Fork. A change to the blockchain protocol which is incompatible with previous versions and therefore creates a new blockchain. Examples of cryptocurrencies that have been created from a hard fork include Bitcoin SV, Bitcoin Cash, and Bitcoin Gold.
- Soft Fork. A change to the blockchain protocol that is compatible with previous versions and therefore does not create a new blockchain.

Mining. The process of solving complex mathematical calculations that confirm cryptocurrency transactions and, as payment, provides the “miner” newly generated units of the underlying cryptocurrency. Mining is essential to maintaining the blockchain ledger and can be conducted by an individual or a mining pool .

Proof of Stake. A way of earning rewards for holding certain cryptocurrencies. A holder of a cryptocurrency gets selected to add the latest batch of transactions to the blockchain and earn some crypto in exchange. The exact details vary by project, but in general proof of stake blockchains employ a network of “validators” who contribute — or “stake” — their own crypto in exchange for a chance of getting to validate new transaction, update the blockchain, and earn a reward.

Proof of Work. The original crypto consensus mechanism, first used by Bitcoin. Proof of Work (PoW) is a decentralized consensus mechanism that requires members of a network to expend effort solving an arbitrary mathematical puzzle to prevent anybody from gaming the system. It is used widely in cryptocurrency mining, for validating transactions and mining new tokens. PoW at scale requires huge amounts of energy, which only increases as more miners join the network.

Wash Trading. Artificially inflating transaction volumes to misrepresent the market for a virtual currency and increase its value. These actions may include traders working with brokers or the deployment of a “bot” making online trades to show increased activity.

2. Background on Regulatory Requirements for Virtual Currencies

Virtual currencies are subject to regulation in the United States by multiple government agencies, including:

- a) SEC and CFTC have certain regulations that apply to virtual currencies. *See, e.g., Securities & Exchange Commission, Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO* (Release No. 81207, July 25, 2017); *Commodity Futures Trading Commission, A CFTC Primer on Virtual Currencies* (Oct. 17, 2017).

- b) U.S. Treasury via FinCEN has registration and reporting requirements for virtual currency exchanges. *See, e.g., FinCEN, Application of FinCEN's Regulations to Persons Administering, Exchanging, or Using Virtual Currencies* (FIN-2013-G001, Mar. 18, 2013).
- c) IRS requires that taxes be paid on profits from virtual currency. *See, e.g., Internal Revenue Service, IRS Virtual Currency Guidance: Virtual Currency Is Treated as Property for U.S. Federal Tax Purposes; General Rules for Property Transactions Apply* (Mar. 25, 2014).

3. Summary of MyBigCoin Investigation Findings

Ms. Clegg investigated My Big Coin (“MBC”) and developed certain findings, including the following summarized findings:

- a) MBC purported to offer a virtual currency and a virtual currency exchange service between (at least) approximately 2014 and 2017. During that period, MBC also made claims about its virtual currency, including that it was a cryptocurrency that could be mined and that the cryptocurrency was backed by gold.
- b) Based on blockchain analysis, MBC was not available as a cryptocurrency until June 28, 2017.
- c) A review of public databases (*e.g.*, Coinlib.io and CoinGecko), cryptocurrency exchanges (*e.g.*, Nova Exchange), and MBC’s statements (*e.g.*, Facebook and Twitter) also suggest that MBC was not traded as a cryptocurrency until after June 28, 2017.
- d) Once MBC was being traded as a cryptocurrency, the trading that occurred is indicative of wash trading, and several other abnormalities were observed with the protocol, transactions, block height, and coin distribution.
- e) CipherTrace analysts observed signs of wash trading through multiple transactions.
- f) Other abnormalities with MBC’s business practices include that MBC did not comply with regulatory and reporting requirements, including those of FinCEN and IRS.

Part III: The Bases and Reasons for the Findings

Various methods and sources were used to conduct this investigation and form opinions. Common methods of investigating virtual currency and cryptocurrency include:

1. Review any reports made to government regulatory agencies (*e.g.*, SEC, CFTC, FinCEN, or IRS).
2. Review statements made by the company, its founders, and its customers or users, including statements made online and through social media.
3. If the virtual currency company claimed to be offering a cryptocurrency, review available blockchain data and look for other evidence to validate any findings, including information from cryptocurrency exchanges and public databases.

Each are addressed below.

1. Regulatory Reporting

A review of MBC's regulatory compliance record revealed the following:

- a) According to the IRS, MBC did not file tax returns. *See* Appendix F.
- b) According to FinCEN, MBC did not register with the U.S. Treasury. *See* Appendix G.
- c) According to the CFTC, Mr. Crater was the owner of MBC and MBC never registered with the CFTC. *See* Appendix H.

2. Statements by Crater, MBC, and MBC's Customers and Users

Various statements demonstrated that MBC was making claims about its virtual currency and related services, including that MBC operated as a cryptocurrency. These statements included, by way of example:

- a) Randall Crater LinkedIn Statements. Examples of statements from Mr. Crater's LinkedIn page (previously available at www.linkedin.com/in/randall-crater-699a8663/, and available in Appendix A) include:
 - i. "We are the only Cryptocurrency to be backed by Gold!"
 - ii. "Send money \$\$\$ in seconds anywhere in the world!"
 - iii. "MyBigCoin Inc is the only Commercial based Cryptocurrency in the World!"
- b) MBC Website Statements. Examples of statements from MBC's website (previously available at www.mybigcoin.com, and samples available in Appendix B) include:
 - i. "Send MBC to anyone, instantly"

- ii. "Mine them"
- iii. "My Big Coin coming to a merchant near you"
- iv. "MY BIG COIN is quoted, at the currency value of the coin of that day"
- v. Picture of the "My Big Coin" Mastercard logo
- vi. Links to an MBC Exchange, YouTube, Facebook, and Twitter

c) MBC Exchange Website Statements. The MBC Exchange's website (previously available at mybigcoinexchange.com, and samples available in Appendix C) reflected:

- i. Offers to sell or buy MBC, and the exchange price.
- ii. The Exchange did not indicate that it is facilitating the transfer of cryptocurrencies using a blockchain, but instead people trading dollars for an MBC virtual currency.
- iii. The Exchange did not indicate that Coins can be traded for anything but U.S. dollars.

d) MBC on YouTube. Examples of statements made in an MBC YouTube video (previously available at <https://youtube.com/watch?v=PSPdcdW7lOQ&t>) include:

- i. "First decentralized virtual currency"
- ii. "Several currency exchanges exist where you can trade your MyBigCoins for dollars, euros and more."

e) MBC on Facebook and Twitter. Examples of images and posts from the MBC's Facebook and Twitter pages (available in Appendix D and Appendix E) include:

- i. References to MBC offering a cryptocurrency prior to June 28, 2017.
- ii. References to MBC offering a cryptocurrency after June 28, 2017, including references to cryptocurrency exchanges and databases.

3. Blockchain Analysis and Related Investigatory Steps

a) When MBC Cryptocurrency Trading Began

MBC claimed to offer a cryptocurrency, leading the investigation to conduct blockchain analysis of the MBC blockchain and look for other evidence to validate any findings. Blockchain analysis revealed that MBC was first available as a cryptocurrency on June 28, 2017, the date of the genesis block the the MBC blockchain. There is no evidence of a "fork" on the MBC blockchain prior to that date. These findings are congruent with certain public statements made by MBC. For example, while MBC had previously made references to its cryptocurrency, the public ledger was only published after June 28, 2017.

The investigation also searched multiple exchanges for "My Big Coin" and "MBC" and reviewed public databases that track virtual currencies trading history and value (e.g., Coin Gecko and CoinLib). These investigatory steps did not reveal evidence that MBC was trading as a cryptocurrency prior to June 28, 2017. There was evidence of MBC being traded as a

cryptocurrency on Nova Exchange (novaexchange.com). Nova Exchange was an altcoin cryptocurrency exchange based in Sweden. The exchange closed in October of 2019 and there were a multitude of screen captures available on the web.archive.org. According to information available on the web.archive.org, MBC was trading on Nova Exchange on September 3, 2017. This was the earliest that the link novaexchange.com/markets was captured by web.archive.org.¹

b) Analysis of MBC Cryptocurrency Trading

After June 28, 2017, the trading of MBC was indicative of “wash trading” and there were also several abnormalities with the protocol, transactions, block height, and coin distribution, including:

- Lack of white or yellow papers describing the work and offering insight into the project. While not mandatory, it is typical practice within the technology realm to publish the details of a particular technology. A yellow paper is a theoretical explanation of the product. White papers are commonly used to describe the theory behind a new technology of computer methodology.
- The lack of evidence of a variety of users.
- The lack of transparency into the protocol’s transaction validation system, MBC never clearly defined whether its blockchain was Proof of Work or Proof of Stake and the manner in which the blockchain disbursed newly created MBC. The MBC blockchain appeared to function as proof of work.
- A lack of open-source software related to the distributed ledger.
- The link provided by GitHub for the MBC public code was for a wallet, not a blockchain or any type of ledger code.
- Analysis of individual blocks showed the majority of blocks had a single transaction contained in them. By contrast, Bitcoin blocks typically have several thousands of transactions in each block. Single-transaction blocks could cause several issues, the most notable of which is the inability to scale and lack of efficiency.
- A high number of blocks in a short period that is not congruent with other blockchain activity with similar block times and structure.²

¹ MBC Twitter provided a link to the Nova Exchange on July 28, 2017. On June 21, 2018, MBC Twitter also provided a link to CryptoBridge, but there are no screen captures from web.archive.org to validate whether MBC was ever listed on that exchange. GitHub also purported to provide a link to MBC’s public code. GitHub’s website also does not reflect MBC cryptocurrency trades prior to June 2017.

² The MBC blockchain started on June 28, 2017 and reached block height 686889 on September 18, 2020.

- MBC blockchain demonstrated erratic block times. Most blockchains have a discernable average block time (*e.g.*, Bitcoin which averages 10 minutes, Ethereum averages 13-15 seconds, and Dash about 2 minutes 30 seconds). The average number of blocks during the first phase of MBC was 1263.73 blocks per day, whereas during the second phase it decreased significantly to 343.55 blocks per day.
- A sample of the MBC block times shows not only erratic times, but also mistimed blocks.
- As indicated in the original report, CipherTrace analysts observed signs of wash trading when MBC demonstrated many transactions from same address to same address. In a similar fashion to money laundering, transaction from one account to one account often are superfluous or done for obfuscation.
- Most users conducting crypto transactions compare this to a price point like the U.S. Dollar or a predetermined amount of crypto for payment of services or goods. Therefore, transactions of exact and round numbers in BTC are not the majority. For instance, as of 04/13/2022 @ 4:38pm eastern time, \$1500.00 is equal to 0.036 BTC. While .050 BTC is equal to \$2058.95 USD. MBC transactions routinely registered as exact, round numbers.